IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Ramanujan Valmiki, et al.

U.S. Serial No.: 10/623,839

Filed: July 16, 2003

For: VIDEO AND GRAPHICS SYSTEM WITH AN MPEG VIDEO DECODER FOR CONCURRENT MULTI-ROW DECODING

Examiner: Sajous, Wesner

Group Art Unit: 2628

Confirmation No.: 6514

On March 29, 2007

LITIGATION STATEMENT PURSUANT TO MPEP § 2001.06(C) and INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir-

The owner of record of the present application, Broadcom Corporation, is currently involved in a patent infringement action with Qualcomm, Inc., Case No. 06-CV-0660 B, pending in the Southern District of California.

Pursuant to MPEP 2001.06(c), the Applicants would like to bring to the attention of the U.S. Patent and Trademark Office that the subject matter currently being claimed in the present application may be related to at least one of the patents currently asserted by Broadcom in the above-mentioned lawsuit.

The Applicants have also attached with this electronic submission a completed PTO form PTO/SB/08A which has seven (7) pages. Copies of each printed reference listed in the PTO/SB/08A form are attached with this electronic submission. Applicants, however, have not submitted U.S. Patents or other references previously provided to or by the PTO in this application. Fifty-seven (57) references are attached in this electronic submission.

The references being submitted have been either cited, produced or relied upon by Qualcomm thus far during the show-mentioned lawwiit. This submission is in no way intended as an admission that the submitted references constitute prior at under any subsection of 35 U.S.C. §102 or §103. Applicant expressly relians the right to agree that any of the cited references are not indeed prior art or to take any actions necessary to remove any of the cited references from the available prior at

The Examiner is requested to initial the attached PTO/SB/08A and return one copy to the applicants to indicate consideration of the attached references.

No fee is believed to be due because:

The applicant(s) believe(s) that this statement and enclosures are being filed before the first Office action on the merits has been mailed by the PTO. The basis of this belief is that no Office action on the merits appears to have been received by the undersigned to date.

The Commissioner is hereby authorized to charge any fees which are presently required, or credit any overpayment, to Deposit Account No. 13-0017.

Respectfully submitted,

Date: March 29, 2007

/Mirut P. Dalal/ Mirut P. Dalal Reg. No. 44,502 McAndrews, Held & Malloy, Ltd. 500 West Madison Street, Suite 3400 Chicago, Illinois 60661 (312) 775-8000

PTO/SB/08A (07-06)

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| | | | Application Number | 10/623,839 | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | | | Filing Date | July 16, 2003 | |
| | | | First Named Inventor | Ramanujan | |
| | | | | Valmiki | |
| | | | | Group Art Unit | 2628 |
| (use as many sheets as necessary) | | | Examiner Name | Sajous, Wesner | |
| | | | Attorney Docket Number | 17413US02 | |
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| | | | U.S. PATENT DO | DCUMENTS | |
|----------|------|-----------------|------------------|-----------------------------|---|
| Examiner | Cite | Document Number | Publication Date | Name of Patentee or | Pages, Columns, Lines, Where Relevant Passages or Relevant |
| Initial* | No.1 | ((fixepan) | MM-DD-YYYY | Applicant of Cited Document | Figures Appear |
| | A1 | 4,020,332 | 04-26-1977 | Crochiere et al. | |
| | A2 | 4,367,466 | 01-04-1983 | Takeda et al. | 1 |
| | A3 | 4,532,547 | 07-30-1985 | Bennett | 1 |
| - | A4 | 4,679,040 | 07-07-1987 | Yan | |
| | A5 | 4,688,033 | 08-18-1987 | Carini et al. | 1 |
| | A6 | 4,954,970 | 09-04-1990 | Walker et al. | |
| | A7 | 4,959,718 | 09-25-1990 | Bennett | |
| | A8 | 4,967,392 | 10-30-1990 | Werner et al. | |
| | A9 | 5,043,714 | 08-27-1991 | Periman | |
| | A10 | 5.097,257 | 03-17-1992 | Clough et al. | |
| | A11 | 5,142,273 | 08-25-1992 | Wobermin | |
| | A12 | 5,155,816 | 10-13-1992 | Kohn | |
| | A13 | 5,258,747 | 11-02-1993 | Oda et al. | |
| | A14 | 5.262.854 | 11-16-1993 | No | |
| | A15 | 5.307.177 | 04-26-1994 | Shibata et al. | |
| | A16 | 5.384.912 | 01-24-1995 | Oorling et all. | |
| | A17 | 5.396.567 | 03-07-1995 | Jess | |
| | A18 | 5.398.211 | 03-14-1995 | Witenz et al. | |
| | A19 | 5.404.447 | 04-04-1995 | Drako et al. | |
| | A20 | 5.418.535 | 05-23-1995 | Masucci et al. | |
| | A21 | 5.432.900 | 07-11-1995 | Rhodes et al. | |
| | A22 | 5,434,683 | 07-18-1995 | Sokine et al. | |
| | A23 | 5,434,957 | 07-18-1995 | Moler | |
| | A24 | 5.487.144 | 11-14-1995 | Secon et al. | |
| | A25 | 5,471,411 | 11-28-1995 | Adams et al. | |
| | A26 | 5.515.077 | 05-07-1996 | Taleyama | |
| | A27 | 5.528.054 | 06-11-1996 | Greenfield et al. | |
| | A28 | 5.533.182 | 07-02-1996 | Bates et al. | |
| | A29 | 5.546,103 | 08-13-1996 | Rhodes et al. | |
| | A30 | 5,550,594 | 08-27-1996 | Cooper et al. | |
| | A31 | 5.570.296 | 10-29-1996 | Heyl et al. | |
| | A32 | 5.577.187 | 11-19-1996 | Mariani | |
| | A33 | 5,600,364 | 02-04-1997 | Hendricks et al. | |
| | A34 | 5,604,514 | 02-18-1997 | Hancock | |
| | A35 | 5.614.952 | 03-25-1997 | Boyce of al. | |
| | A36 | 5.615.376 | 03-25-1997 | Ranganathan | |
| | A37 | 5.619.337 | 04-08-1997 | Nampaty | |
| | A38 | 5.621.860 | 04-15-1997 | Drows | |

| A38 | 5,621,869 | 04-15-1997 | Drews | |
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| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|--------------|--|--------------------------------|--|---|
| Examiner Initial* | Cite No.1 | Document Number Number-Kind Code ⁹ (If known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | A39 | 5 621 906 | 04-15-1997 | O'Neil et al. | Figures Appear |
| | A40 | 5.825.811 | 04-29-1997 | Yokota et al. | |
| - | A41 | 5.825.764 | 04-29-1997 | Tsuimoto et al. | |
| | A42 | 5.635.985 | 06-03-1997 | Boyce et al. | |
| | A43 | 5.638.501 | 06-10-1007 | Gough et al. | |
| | A44 | 5,840,543 | 06-17-1997 | Farrell et al. | |
| | A45 | 5.664.162 | 09-02-1997 | Dye | |
| | A48 | 5.694.143 | 12-02-1997 | Fieldor et al. | |
| | A47 | 5,696,527 | 12-09-1997 | King et al. | 1 |
| | A46 | 5,706,478 | 01-06-1998 | Die Die | |
| | A49 | 5,708,764 | 01-13-1998 | Bornel et al. | |
| | A50 | 5,719,593 | 02-17-1998 | De Lange | t |
| | A51 | 5,727,084 | 03-10-1998 | Pan et al. | |
| | A52 | 5.742.779 | 04-21-1998 | Sterie et al. | |
| | A53 | 5,745,095 | 04-28-1998 | Parchem et al. | |
| | A54 | 5,748,983 | 05-05-1998 | Gulick et al. | |
| | A55 | 5.751.979 | 05-12-1998 | McCrony | |
| | A58 | 5,754,185 | 05-19-1998 | Hean et al | |
| | A57 | 5.757.377 | 05-26-1998 | Rei-Loh Lee et al. | |
| | A58 | 5,758,177 | 05-26-1998 | Gulick et al. | |
| - | A59 | 5.781.518 | 06-02-1998 | Rostoker et al. | |
| | A80 | 5,764,238 | 06-09-1998 | lumet al | |
| | A61 | 5,790,136 | 08-04-1998 | Hoffert et al. | |
| | A82 | 5,790,795 | 08-04-1996 | Hough | |
| | A63 | 5,790,842 | 08-04-1998 | Charles et al. | |
| | A64 | 5.793,445 | 08-11-1998 | Lum et al. | |
| | A65 | 5,815,137 | 09-29-1998 | Weatherford et al. | |
| | A68 | 5,628,383 | 10-27-1998 | May et al. | |
| | A67 | 5.831.615 | 11-03-1998 | Draws et al. | |
| | ASS | 5,631,615 | 12-01-1998 | Yu et al. | |
| | A60 | 5.864.345 | 01-26-1999 | Wickstrom et al. | |
| | A70 | 5,867,166 | 02-02-1999 | Mybryoid et al. | |
| | A71 | 5,867,100 | 02-02-1999 | Gulick et al. | |
| | A72 | 5.874.967 | 02-23-1999 | West et al | |
| | A73 | 5.894.300 | 04-13-1999 | Takizawa | |
| | A74 | 5,894,300 | 06-22-1999 | Yamaqishi et al. | |
| | A74 A75 | 5,914,728 | 07-06-1999 | Washington et al. | |
| | A75 | 5,920,682 | 07-06-1969 | Shu of al. | |
| | A76 | 5,920,682 | 07-06-1969 | Shu et al. Klamura et al. | - |
| | A778 | 5,923,316 | 07-13-1999 | Milis et al. | |
| | A78 | 5,923,385 | 07-13-1999 | Adams et al. | |
| | A/9 A80 | 5,926,647 | 07-20-1999 | Adams et al. | |
| | A81 | 5,940,089 | 08-24-1999 | Marcard et al. | |

EXAMINER

DATE CONSIDERED

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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| | | | U.S. PATENT DO | CUMENTS | |
|----------------------|--------------|--|--------------------------------|---|--|
| Examiner Initial* | Cite No.1 | Document Number Number-Kind Code ² (Filtrown) | Publication Data MM-DD-YYYY | Name of Patenties or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear |
| | A82 | 5.949.432 | 09-07-1999 | Gough et al. | |
| | A83 | 5.949.439 | 09-07-1999 | Ben-Yoseph et al. | |
| | A84 | 5,951,644 | 09-14-1999 | Lambrecht et al. | |
| | A85 | 5,956,041 | 09-21-1999 | Koyamada et al. | |
| | A86 | 5,959,626 | 09-28-1999 | Garrison et al. | |
| | A87 | 5,959,637 | 09-28-1999 | Mills et al. | |
| | A88 | 5,960,464 | 09-28-1999 | Lam | |
| | A89 | 5.963.201 | 10-05-1989 | McGregger et al. | |
| | A90 | 5.963.262 | 10-05-1999 | Ke et al. | |
| | A91 | 5,977,933 | 11-02-1999 | Wicher et al. | |
| | A92 | 5.978.509 | 11-02-1999 | Nachtercaele et al. | T |
| | A93 | 5.982.381 | 11-09-1999 | Joshi et al. | |
| | A94 | 5.982.459 | 11-09-1999 | Fendranto et al. | |
| | A95 | 5.987.555 | 11-18-1999 | Alzien et al. | |
| | A96 | 8.002.411 | 12-14-1999 | Dive | |
| | A97 | 8.002.882 | 12-14-1999 | Garde | |
| | A98 | 8.005.546 | 12-21-1999 | Keene | |
| | Agg | 6.008.303 | 12-21-1999 | Barnaby et al. | |
| | A100 | 6.018.803 | 01-25-2000 | Kardach | |
| | A101 | 6,023,302 | 02-08-2000 | Macinnis et al. | |
| | A102 | 6,023,738 | 02-08-2000 | Priem et al. | |
| | A103 | 6,028,583 | 02-22-2000 | Hamburg | |
| | A104 | 8,038,031 | 03-14-2000 | Murphy | |
| | A105 | 6.046.740 | 04-04-2000 | LaRoche et al. | |
| | A108 | 8.064,678 | 05-16-2000 | Sietlery et al. | |
| | A107 | 8.078.305 | 08-20-2000 | Mizutani | |
| | A108 | 6.081.854 | 06-27-2000 | Priem et al. | |
| | A109 | 8.068.046 | 07-11-2000 | Larson et el. | |
| | A110 | 6.088.355 | 07-11-2000 | Mills et al. | |
| | A111 | 8.092.124 | 07-18-2000 | Priem et al. | |
| | A112 | 6,094,226 | 07-25-2000 | Ke et al. | |
| | A113 | 6,098,048 | 08-01-2000 | Cooper et al. | |
| | A114 | 6,100,826 | 08-08-2000 | Jeon et al. | |
| | A115 | 6,100,899 | 08-08-2000 | Ameline et al. | |
| | A116 | 6,105,048 | 08-15-2000 | He | |
| | A117 | 8,108,014 | 08-22-2000 | Dye | |
| | A118 | 6,111,896 | 08-29-2000 | Slattery et al. | |
| | A119 | 6,121,978 | 09-19-2000 | Mier | |
| | A120 | 6,124,865 | 09-26-2000 | Meinerth et al. | |
| | A121 | 6,125,410 | 09-28-2000 | Salbaum et al. | |
| | A122 | 6.133.901 | 10-17-2000 | Law | |
| | A123 | 6.151,030 | 11-21-2000 | DeLoeuw et al. | |
| | A124 | 6.151.074 | 11-21-2000 | Werner | |

EXAMINER

DATE CONSIDERED

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of the form with next communication to applicant. to test some varience contrainment on appeared. "Applicant's single children designation number (options)." See Kinds Codes of USPTO Patent Decements at www.mpts.gov or MPEP 901.04. "Enter Office that issued the document, by the two-better code (WIPO Standard ST.3)." Fee Express some procedure serial surviver of the patent of document, the indication of the year of the engine of the Emperor some procedure serial surviver of the patent of document. Men of documents is found of documents of the patent o language Translation is attached

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PTO/SR/08A (07-05)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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U.S. PATENT DOCUMENTS Pages, Columns, Lines, Where Document Number Examiner Cite Publication Date Name of Patentee or Number-Kind Code Relevant Passages or Relevant MWDD-XXXX Applicant of Cited Document Initial* Nn Figures Appear (f known) A125 A126 6,157,415 6,157,978 Gien 12-05-2000 Ng et al. A127 A128 6,160,969 12-12-2000 Hendricks et al. Larson et al. 6,169,843 01-02-2001 Lenihan et a Chan et ai 6,169,064 02-13-2001 Macinnis et ai Melo et al 03-06-2001 03-20-2001 03-20-2001 6.204.859 Jouppi et a 6,205,260 Crinon et al 03-27-2001 04-03-2001 05-08-2001 Porter 6,206,354 6,212,590 6,229,550 6,239,610 6,252,606 6,263,019 6,263,396 6,266,072 6,266,753 Melo et al Gloudemans et al 05-08-2001 05-29-2001 08-26-2001 07-17-2001 07-17-2001 07-24-2001 07-24-2001 Van Hock et al A139 Snyder et al. Ryan A141 Cottle et al Koga et al A14 Hicok et al 07-24-2001 07-31-2001 08-07-2001 10-30-2001 11-20-2001 12-04-2001 12-04-2001 01-01-2002 01-08-2002 6,269,107 6,271,626 Jong Pol et al Milis Jiang Chow et a Auld et al. 6,326,984 A146 A149 6,327,000 6,335,746 6,337,703 6,342,892 6,351,471 6,351,474 A150 A151 Enckida et a Konar et al. Van Hook et a A152 A153 Robinett et al Robinott et al. A154

| | FOREIGN PATENT DOCUMENTS | | | | | |
|---------------|--------------------------|--|------------------|-----------------------------|---|----|
| Examiner Cite | | Foreign Patent Document | Publication Date | Name of Palentse or | Pages, Columns, Lines, | +0 |
| Initials* | No. 1 | Country Code*-Number *-Kind Code * (# Anown) | MM-DD-YYYY | Applicant of Cited Document | Where Relevant Passages or Relevant Figures Appear | 1. |
| | B1 | EP 0746116 A2 | 12-04-1996 | Hiratsuka | | |
| | B2 | EP 0 752 695 | 01-08-1997 | O'Sullivan | | |
| | B3 | EP 0840276 A2 | 05-06-1998 | Benbassat | | |
| | B4 | EP 0840277 A2 | 05-06-1998 | Chauvei | | |
| EXAMINER | | DATE CONSID | ERED | | | |

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Macinnis et al

Auld et al.

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06-25-2000

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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| Examiner Cit | | Foreign Patent Document | Publication Date | Name of Palentee or | Pages, Columns, Lines, | 1 -0 |
| Initials* | No. 1 | Country Code ² Number ⁴ -Kind Code ⁹ (# known) | MM-DD-YYYY | Applicant of Cited Document | Where Relevant Passages or Relevant Floures Appear | ١, |
| | B5 | EP 0 840 505 | 05-06-1998 | Chauvel | | $\overline{}$ |
| | B6 | GB 2267627 A | 03-01-1995 | Wong | | _ |
| | B7 | WO 94/10641 | 05-11-1994 | Mical | | _ |
| | B8 | WO 00/28518 | 05-18-2000 | Macinnis | | \vdash |

| | | OTHER ART NON PATENT LITERATURE DOCUMENTS |
|-----------|------|---|
| Examiner | Cite | Include name of the author (in CAPITAL LETTERS), side of the article (when appropriate), title of tha |
| Initials* | No.1 | item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue |
| IIIIIIdis | | number(s), publisher, city and/or country where published |
| | C1 | Plaintiff and Counterdefendant Qualcomm Incorporated's Preliminary Invalidity Contentions For U.S. Patent 8,501,480 and 6,570,579 |
| | ß | Thomas Porter & Torn Duff, "Compositing Digital Images", Computer Grephics, Vol. 18, No. 3, July 1984, pp. 253-259 |
| | C3 | Akeley, K. & Jermoluk T., "High-Parformance Polygon Rendering," 22 Computer Graphics No. 4 (ACM August 1966). |
| | C4 | Apgar, B., et al., "A Display System for the Stellar Graphics Superconductor Model GS1000," 22 Computer Graphics No. 4 (ACM August 1988). |
| | C5 | Asal, M.D., et al., "Novel Architecture for a High Performance Full Custom Graphics Processor," (IEEE 1989). |
| | C8 | Awaga, M., et al., "3D Graphics Processor Chip Set," (IEEE December 1995). |
| | C7 | Cox, M. & Bhandari, N., "Architectural Implications of Herdware-Accelerated Bucket Rendering on the PC," (Association for Computing Machinery SIGGRAPH/Eurographics Workshop 1997). |
| | C8 | Cyrlx Corporation Manual, copyrighted 1996, 1997, and all underlying development work. |
| | C9 | Deering, M., et al., "The Triangle Processor and Normal Vector Shader: A VLSI System for High Performance Graphics," 22 Computer Graphics No. 4 (ACM August 1998). |
| | C10 | Donovan, W., et al., "Pixel Processing in a Memory Controller," (IEEE Computer Graphics and Applications 1995). |
| | C11 | Dutton, T., "The Design of the DEC 3000 Model 500 AXP Workstation," (IEEE 1993). |
| | C12 | Foley, James, D., et al., "Introduction to Computer Graphics," (Addison-Wesley Publishing Co. 1994) ("Introduction to Computer Graphics"). |
| | C13 | Galbi, D., et al., "An MPEG-1 Audio/Video Decoder with Run-Langth Compressed Antialiased Video Overlays," (1995 IEEE International Solid-State Circuits Conference). |
| | C14 | Glaskowsky, Peter, "Cyrix Creates Ultimate CPU for Games," Microprocessor Report, December 8, 1997. |
| | C15 | Glaskowsky, Peter, "Intel Displays 740 Graphics Chip: Auburn Sets New Standard for Quality - But Not Speed," Microprocessor Report No. 2, Februsny 16, 1996. |
| | C16 | Gwenney, I, "Verile: A Programmable 3D Chip: Rendition Uses Internal RISC CPU for Versatility, Performance," 10 Microprocessor Report No. 6, May 8, 1996. |
| | C17 | Hosotani S., et al., "A Display Processor Conforming to all DTV Formats with 188-TAP FIR Filters and 284 Kb FIFO Memories," (IEEE 1997 (Manuscript received June 13, 1997)). |
| | C18 | Krittel, G. & Straber, W., "VIZARD - Visualization Accelerator for Resitime Display," (Association for Computing Machinery SIGGRAPH/Eurographics Workshop 1997). |
| | C19 | Lewis, R., et al., "Delivering PCI in HP B-Class and C-Class Workstations: A Case Study in the Challenges of Interfacing with Industry Standards," (Hewlett-Packard Journal May 1996). |
| | C20 | Manapelly, R. & Sprague, D., "Intel's i750 (R) Video Processor – The Programmable Solution," (IEEE 1991). |
| EXAMINER | | DATE CONSIDERED |

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| | Complete if Known | | |
| | Application Number | 10/623,839 | |
| | Filing Date | July 16, 2003 | |
| | First Named Inventor | Ramanujan | |
| | | Valmiki | |
| | Group Art Unit | 2628 | |
| | Examiner Name | Sajous, Wesner | |
| 4 | Attorney Docket Number | 17413US02 | |

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| | | OTHER ART – NON PATENT LITERATURE DOCUMENTS |
| Examiner | Cite | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, manazine, journel, serial, symposium, catalog, etc.), date, page(s), volume-issue |
| Initials* | No.1 | number(s), publisher, city and/or country where published |
| | C21 | McCormack, J., et al., "Neon: A Single-Chip 3D Workstation Graphics Accelerator," (SIGGRAPH Eurograph Workshop |
| | | Graph Hardware August 31, - Sept. 1, 1998). |
| | C22 | Norrod, F. & Wawrzynak, R., "A Multimedia-Enhanced x88 Processor, Digest of Yachrical Papers," ISSCC95 (February 9, 1996). |
| | C23 | Oguchi, T., et al., "A Single-Chip Graphic Display Controller," (1981 IEEE International Solid-State Circuits Conference). |
| | C24 | Sofarmen, Z., et al., "Advanced Graphics Behind Medical Virtual Reality: Evolution of Algorithms, Hardware, and Software Interfaces," 86 Proceedings of the IEEE No. 3 (IEEE March 1998 (Manuscript received July 3, 1997)). |
| | C25 | Scott, N., et al., "An Ovarview of the VISUALIZE fx Graphics Accelerator Hardware," (Hewlett-Packard Journal May 1998) and all underlying development work ("HP"). |
| | C28 | Sumi, M., et al., "A 40-Mpixel/s Bit Block Transfer Graphics Processor," (IEEE 1989). |
| | C27 | Folsy, Jamas D., at al.; Computer Graphics: Principles and Practice; publication, 1996, 1990; The Systems Programming Series, 4 pages, Second Edition in C; Addison-Wesley Publishing Company, U.S.A. |
| | C28 | Tobias, R., "The LR33020 GraphX Processor: A Single Chip X-Terminal Controller," (IEEE 1992). |
| | C29 | Watkins, J., et al., "A Memory Controller with an Integrated Graphics Processor (IEEE 1993). |
| | C30 | Yao, Yong, "Samsung Launches Media Processor: MSP is Designed for Microsoft's Naw 3D-Softwara Architecture," 10 Microprocessor Raport No. 11, August 26, 1896. |
| | C31 | Yao, Yong, "Competition Heats Up in 3D Accelerators: Market Hungers for a Unified Multimedia Platform from Microsoft," 10 Microprocessor Report No. 15, November 18, 1996. |
| | C32 | Yao, Yong, "Chromatic's Mpact 2 Boosts 3D: Mpact/3000 Becomes First Media Processor to Ship in Volume," 10 Microprocessor Report No. 15, November 18, 1998. |
| | C33 | Motorole, Inc. MC92100 "Scorpion" Graphics Display Generator, SDRAM Controller, and Digital Video Encoder, 1997, 6 pages. |
| | C34 | Power TV, Inc., Eagle ™ Graphics/Audio Media Compositor Data Sheat, Varsion 1.7, Fab. 27, 1997, pp. 83. |
| | C35 | Berekovic, M. & Pirsch, P., "Architecture of a Coprocessor Modula for Image Compositing," (IEEE 1998). |
| | C36 | Blinn, J., "Compositing, Part I: Theory," (IEEE September 1994). |
| | C37 | Blinn, Jim; Jim Blinn's Comer Dirty Pixels; publication; 1998; pp. 179-190; Chapter Sixteen; Morgan Kaufmann Publishers, Inc.; San Francisco, CA, U.S.A. |
| | C38 | Jaspers, et al., "A Flexible Heterogeneous Video Processor System for Television Applications," (IEEE Sept. 25, 1998) |
| | C39 | Li, R., et al., "A Flexible Display Modula for DVD and Set-Top Box Applications," (IEEE Trensections on Consumer Electronics August 1997 (Manuscript received June 13, 1997)). |
| | C40 | Ostermann, J., "Coding of Arbitrarity Shaped Objects with Binary and Greyscale Alpha-Maps: What Can MPEG-4 Do for You?," (Proceedings of the 1998 IEEE International Symposium on Circuits and Systems, May 31-June 3, 1998, Vol. 5). |
| | C41 | Stytz, et al., "Three-Dimensional Medical Imaging: Algorithms and Computer Systems," (ACM Computing Surveys, December 1991). |
| | C42 | Wang, J. & Adelson, E., "Representing Moving Images with Layers," (IEEE Transactions on Image Processing, September 1994). |
| | C43 | Sun, Hulfang et al., "A New Approach for Memory Efficient ATV Decoding," 1997 IEEE International Conference on Consumer Electronics, pp. 174-175, Los Angeles, 1997. |

EXAMINER

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| | First Named Inventor | Ramanujan Valmiki |
| | Group Art Unit | 2628 |
| (use as many sheets as necessary)) | Examiner Name | Sajous, Wesner |
| Sheet 17 10f 17 | Attorney Docket Number | 17413US02 |

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| | C44 | Bao, Jay et al., "HDTV Down-Conversion Decoder," IEEE Transactions on Consumer Electronics, pp. 402-410, vol. 42 No. 3, Aug. 1996. | | | | |
| | C45 | Mokry, Robert et al., "Minimal Error Drift in Frequency Scalability for Motion-Compensated DCT Coding," IEEE Transactions on Circuits and Systems for Video Technology, pp. 392-406, vol. 4, No. 4, Aug. 1994. | | | | |
| | C46 | Vetro, Anthony et et., "Minium Drift Architectures for 3-Layer Scalable DTV Decoding," IEEE Transactions on Consumer Electronics, pp. 527-536, vol. 44, No. 3, Aug. 1998. | | | | |
| | C47 | Lee, Dong-Ho et et., "HDTV Video Decoder Which Can Be Implemented With Low Complexity," IEEE International Conference on Consumer Electronics, pp. 6-7, 1994. | | | | |
| | C48 | Sun, Hulfang, "Hierarchical Decoder for MPEG Compressed Video Data," IEEE Transactions for Consumer Electronics, pp. 559-564, vol. 39, No. 3, Aug. 1993. | | | | |
| | C49 | Yu, Haoping et al., "Block-Based Image Processor for Memory Efficient MPEG Video Decoding," 1999 IEEE International Conference on Consumer Electronics, pp. 114-115, 1999. | | | | |

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